

7

Date: Wednesday, 1/30/2008 8:24:48 AM
User: Kim Johnston

Process Sheet

Customer : CU-DAR001 Dart Helicopters Services	Drawing Name : AVIONICS RISER CONSOLE
Job Number : 37045	
Estimate Number : 10259	
P.O. Number :	Part Number : D212722011
This Issue : 1/30/2008 S.O. No. :	Drawing Number : D3363 REV C
Prsht Rev. : NC	Project Number : N/A
First Issue : / / Type : SMALL /MED FAB	Drawing Revision : C
Previous Run : 29774	Material :
Written By :	Due Date : 2/14/2008 Qty: 4 Um: Each
Checked & Approved By : <u>08 01 30</u>	
Comment : Est Rev:B 05.04.11 Now made at Dart KJ/JLM	
Est Rev:C 07-06-09 Holes now Transfer drilled JLM	

Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :
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1.0 DC

DOCUMENT CONTROL



Comment: DOCUMENT CONTROL

Photocopy bluefile and create labels per PPP D212-722-011 CHG002

08/02/15

08 01 30

08 01 30

2.0

M6063T5A0750W063

Angle6063T5X.75X.75X.063



Comment: Qty.: 7.2450 f(s)/Unit Total : 28.9800 f(s)

Material: 6063-T52 Aluminum angle 3/4" x 3/4" x 0.063" wall(M6063T5A0.750W.063)

Batch: M107021

FF 08-02-08

(4)

3.0

M6063T5C75X75W125

6063 CHANNEL.75X.75X.125



Comment: Qty.: 0.8290 f(s)/Unit Total : 3.3160 f(s)

Material: 6063-T52 Aluminum channel 3/4" x 3/4" x 0.125" wall(M6063T5C.75x.75W.125)]

Batch: M17080

FF 08-02-08

(4)

4.0

D33631

CONSOLE



Comment: Qty.: 1.0000 Each(s)/Unit Total : 4.0000 Each(s)

Pick:

Qty	Part Number	Description	Batch
-----	-------------	-------------	-------

1	D3363-1	Console (Bent)	<u>B37087</u>
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FF 08-02-08

(4)

5.0

SMALL FAB 1

SMALL & MEDIUM FAB RESOURCE 1



Comment: SMALL & MEDIUM FAB RESOURCE 1

1-Cut (2) D3360-1, (2) D3360-3 & (2) D3360-5 to length as per Dwg D3360 Material: 6063-T52 Aluminum angle 3/4" x 3/4" x 0.063" wall

→ PTO

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: D212-722-01 PAR #: NA Fault Category: Prod/FAB ASS' med & Small NCR: Yes No: DQA: D Date: 08/02/15
 QA: N/C Closed: HA Date: 08.02.19

NCR: <u>37845</u>		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
08/02/08	5	1 3360-5 Replaced wrong way.	<u>LSM/L</u>	Replaced	08/02/08 FF	<u>08.02.15</u>	<u>08.02.15</u>	<u>08.02.15</u>

NOTE: Date & initial all entries

Date: Wednesday, 1/30/2008 8:24:48 AM
User: Kim Johnston

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: AVIONICS RISER CONSOLE

Job Number: 37045

Part Number: D212722011

Job Number:



Seq. #:	Machine Or Operation:	Description :
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2-Cut (1) D3361-1 to length as per Dwg D3361	Material: 6063-T52 Aluminum channel 3/4" x 3/4" x 0.125"	
--	--	--

3-Deburr D3360-1/-3/-5 & D3361-1		
----------------------------------	--	--

4-Transfer drill and C'Sink D3360-1/-3/-5 & D3361-1 from D3363-1 as per D3363. Do not rivet together		
--	--	--

5-Deburr all parts		
--------------------	--	--

FF 08-02-12

(4)

6.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

Chemical Conversion Coat as per QSI 005 4.1

BR 08-02-12 (4)

7.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT/CHEMICAL CONVERSION

FF 08-02-12

(4)

8.0

PR351

DZUS FASTENER RAIL



Comment: Qty.: 0.3333 f(s)/Unit Total : 1.3332 f(s)

Material: Dzus Fastener Rail

(PR35-1 or PR3-1/2-1)

Batch: M17763

FF 08-02-12

(4)

9.0

MS20426AD45

Rivet



Comment: Qty.: 44.0000 Each(s)/Unit Total : 176.0000 Each(s)

Pick:

Qty Part Number

Description

Batch

44 MS20426AD4-5

Rivet

M13459

FF 08-02-12

(4)

10.0

MS20426AD46

Rivet



Comment: Qty.: 9.0000 Each(s)/Unit Total : 36.0000 Each(s)

Pick:

Qty Part Number

Description

Batch

9 MS20426AD4-6

Rivet

M103395

FF 08-02-12

(4)

11.0

SMALL FAB 1

SMALL & MEDIUM FAB RESOURCE 1



Comment: SMALL & MEDIUM FAB RESOURCE 1

1-Cut (2) D3362-1 to length as per Dwg D3362 Material: Dzus Fastener Rail

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Wednesday, 1/30/2008 8:24:48 AM
User: Kim Johnston

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: AVIONICS RISER CONSOLE

Job Number: 37045

Part Number: D212722011

Job Number:



Seq. #:

Machine Or Operation:

Description :

Mount Dzus Rails to DT8957 (Radio) and transfer drill into console.

2-Rivet D3360-1/-3/-5 & D3361-1 & D3362-1 as per Dwg D3363
Identify as D3363-041

08/02/15 (4)

FF 08-02-14 (4)

12.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

08/02/15 (4)

13.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1
Pick Packing Kit

14.0

PFSC3538A

Dzus 1/4 turn fastener



Comment: Qty.: 8.0000 Each(s)/Unit Total : 32.0000 Each(s)

Pick: Packing Kit

Qty Part Number

Description Batch

8 PFSC35-38A

Dzus Fastener

M77207 7X M/07/014 25X

1 d3363-041

Console Ass

37045

08/02/15 (4)

15.0

QC4

INSPECT 100% KITS FOR COMPLETENESS



Comment: INSPECT 100% KITS FOR COMPLETENESS

08/02/15 (4)

16.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and pack for shipping as per PPP D212-722-011

Rev D

08/02/15 (4)

17.0

QC21

FINAL INSPECTION/W/O RELEASE



Comment: FINAL INSPECTION/W/O RELEASE

08/02/15 (4)

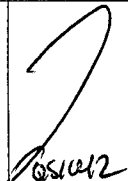
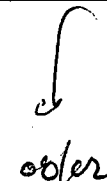
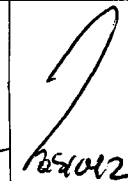
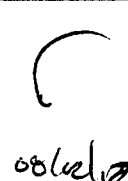
Job Completion



Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____
 QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
08/02/13	#	four (4) holes drill off. some sink holes too deep R.C. incorrect template.		Drill with ALUMINUM ROD m106330 weld per Q51001 grind weld flush and Re- Drill in Alockline nicely per Q51005	JE 08/02/13 FF 08/02/14	 08/02/15	 08/02/15	 08/02/13

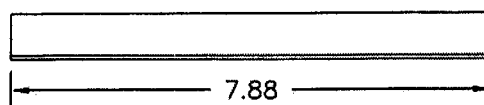
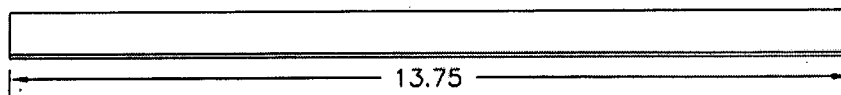
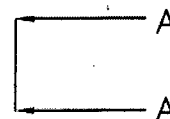
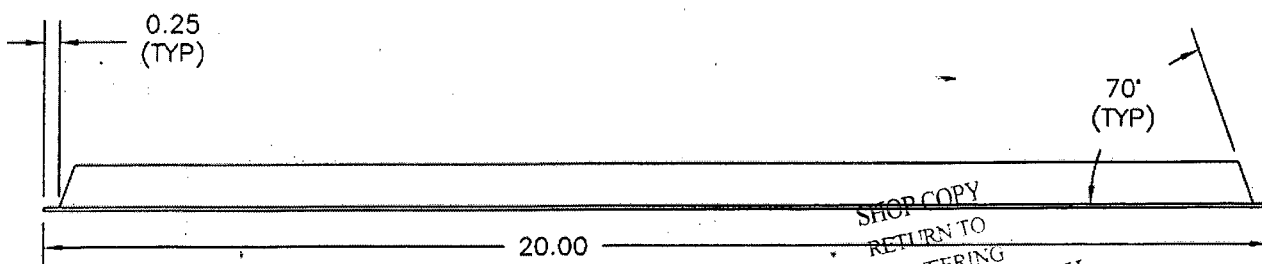
NOTE: Date & initial all entries

DART

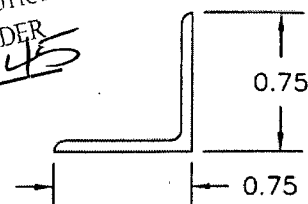
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CHECKED [Signature]	APPROVED [Signature]	DRAWING NO. D3360	REV. A SHEET 1 OF 1
DATE 04.11.29		TITLE ANGLE	SCALE 1:12
A	04.11.29	NEW ISSUE	

RELEASED

05-03-31 [Signature]

D3360-1
(SCALE 1:3)D3360-3
(SCALE 1:3)D3360-5
(SCALE 1:3)

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SECTION A-A
(SCALE 1:1)**D3360-1/-3/-5 ANGLE**

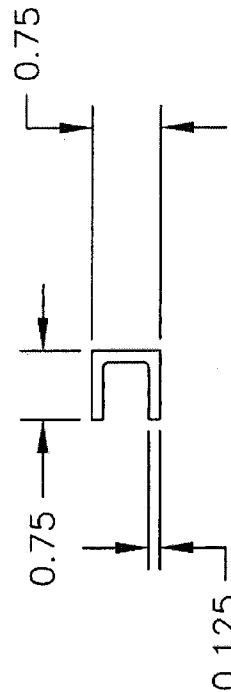
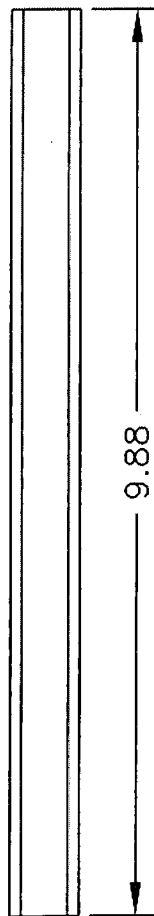
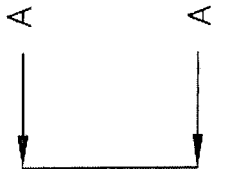
- 1) CUT LENGTH/SHAPE PER DIAGRAM
- 2) MATERIAL: 6063-T52 ALUMINUM
STOCK SIZE: 3/4" x 3/4" x 0.063" ANGLE EXTRUSION
- 3) FINISH: ACID ETCH AND ALODINE PER DART QSI 005 4.1
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) ALL TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED

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DATE 04.11.29	TITLE CHANNEL		SCALE 1:2
A	04.11.29	NEW ISSUE	



SECTION A-A

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05.03.31

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D3361-1 CHANNEL

1) CUT LENGTH/SHAPE PER DIAGRAM

2) MATERIAL: 6063-T52 ALUMINUM

STOCK SIZE: 3/4" x 3/4" x 0.125" CHANNEL EXTRUSION

3) FINISH: ACID ETCH AND ALODINE PER DART QSI 005 4.1

4) ALL DIMENSIONS ARE IN INCHES

5) ALL TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED

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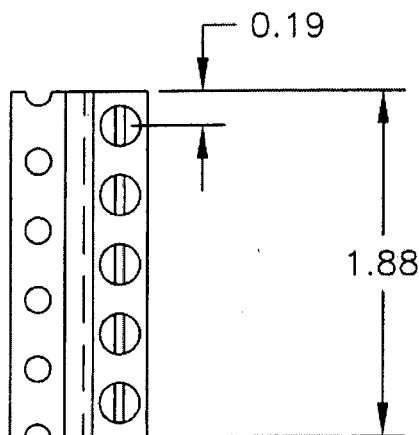
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DATE 04.11.29		TITLE RAIL	SCALE 1:1
A	04.11.29	NEW ISSUE	

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05.03.31 PH



D3362-1 RAIL

- 1) CUT LENGTH/SHAPE PER DIAGRAM
- 2) MAKE FROM DZUS RAIL P/N "PR 3-1/2-1" OR PR-35-1
- 3) TOLERANCES ARE PER DART QSI 018
- 4) ALL DIMENSIONS ARE IN INCHES

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REV. C

SHEET 1 OF 3

DESIGN	DRAWN BY	DRAWING NO.	TITLE	SCALE
P11	PH	D3363	CONSOLE ASSEMBLY	1:5
CHECKED	APPROVED			
DATE				
07.01.26				

A

B

C

A

B

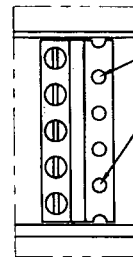
C

DESIGN	DRAWN BY	DRAWING NO.	TITLE	SCALE
P11	PH	D3363	CONSOLE ASSEMBLY	1:5
CHECKED	APPROVED			
DATE				
07.01.26				

RELEASED

07.06.04

TRANSFER DRILL #30 FROM D3362-1 DZUS RAIL THROUGH D3363-1 CONSOLE (TYP 4 PLACES) C'SINK (#0.225 X 100') FROM TOP SIDE OF CONSOLE



DETAIL C
(SCALE 1:2)

DETAIL C

INSTALL D3361-1 & D3362-1 USING MS20426AD4-6 RIVETS (TYP 9 PLACES)

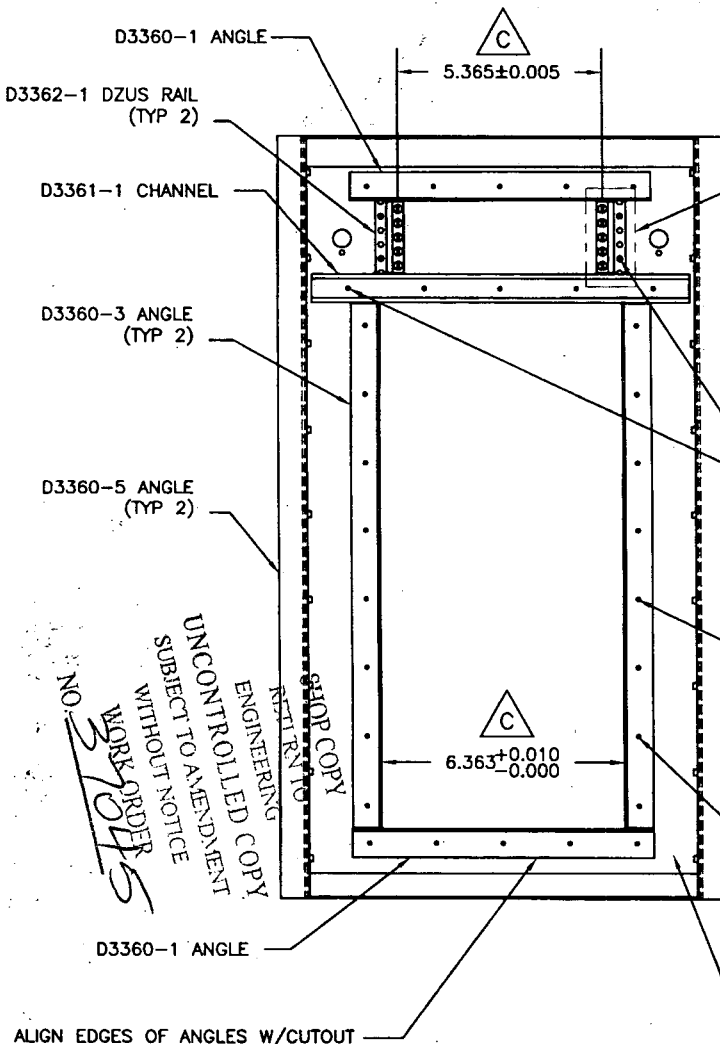
TRANSFER DRILL #30 FROM MATING PARTS THROUGH #40 HOLES IN D3363-1 CONSOLE (TYP 49 PLACES) C'SINK (#0.225 X 100') FROM CONSOLE TOP SIDE

INSTALL D3360-1/-3/-5 ANGLES USING MS20426AD4-5 RIVETS (TYP 44 PLACES)

D3363-1 CONSOLE

PARTS LIST FOR D3363-041 CONSOLE ASSEMBLY

QTY	PART NUMBER	DESCRIPTION
X	D3363-041	CONSOLE ASSEMBLY
2	D3360-1	ANGLE
2	D3360-3	ANGLE
2	D3360-5	ANGLE
1	D3361-1	CHANNEL
2	D3362-1	RAIL
1	D3363-1	CONSOLE
44	MS20426AD4-5	RIVET
9	MS20426AD4-6	RIVET



VIEW A-A FROM UNDER CONSOLE ASSEMBLY

D3363-041 CONSOLE ASSEMBLY

- ASSEMBLE IN ACCORDANCE WITH DART QSI 002
- IDENTIFY WITH DART P/N D3363-041 AND B/N BXXXXX USING FINE POINT PERMANENT INK MARKER
- FINISH: ACID ETCH AND ALODINE PER DART QSI 005 4.1

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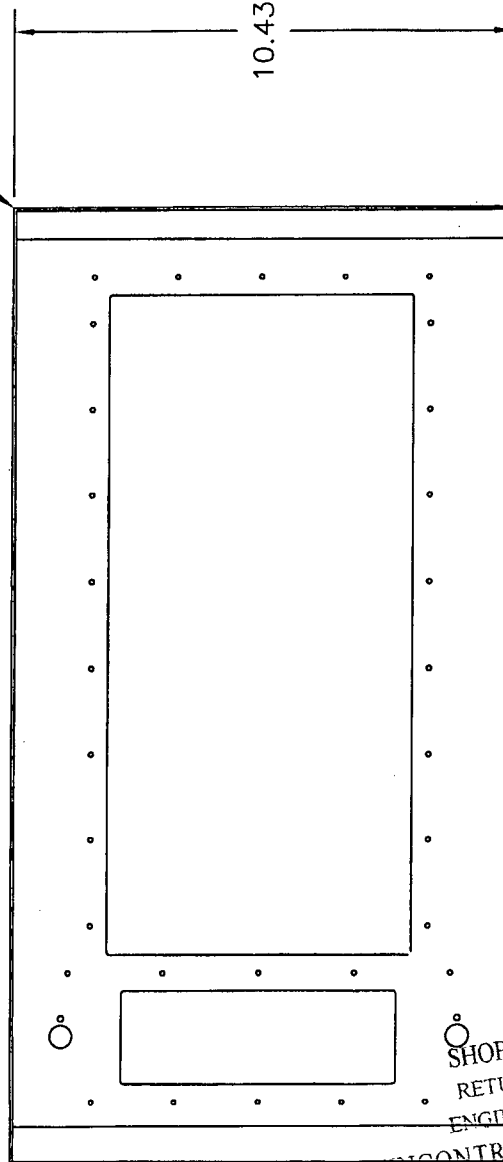
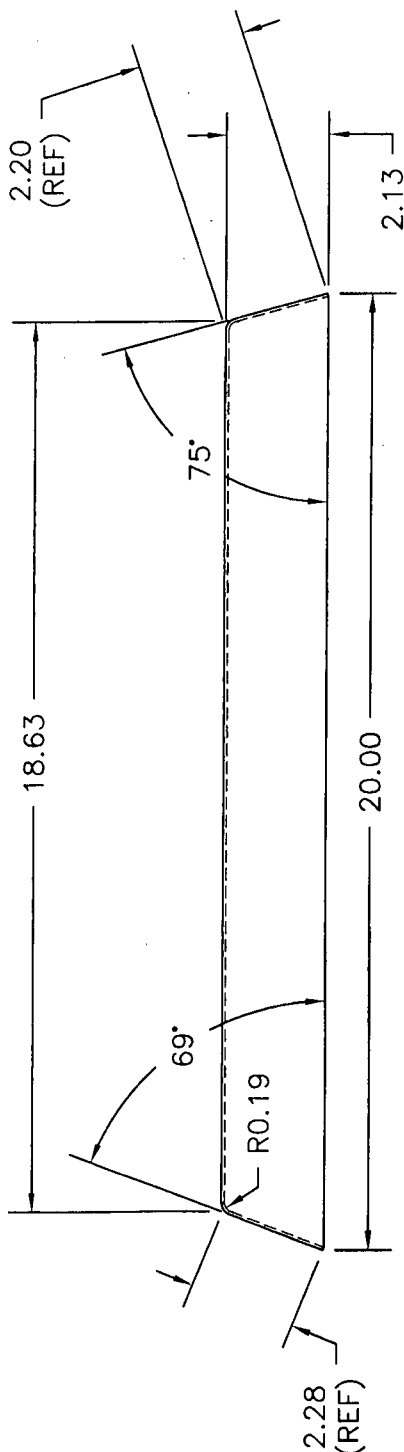
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CHECKED <i>[Signature]</i>	APPROVED <i>[Signature]</i>	DRAWING NO. D3363	REV. C SHEET 2 OF 3
DATE 07.01.26	TITLE CONSOLE ASSEMBLY		SCALE 1:4

GRIND OUTSIDE
WELD FLUSH
(TYP 4 PLACES)

10.430

RELEASED

07.06.04 *[Signature]*



D3363-1 BEND DETAIL

(MAKE FROM D3363-1F FLAT PATTERN)

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D3363-1 CONSOLE

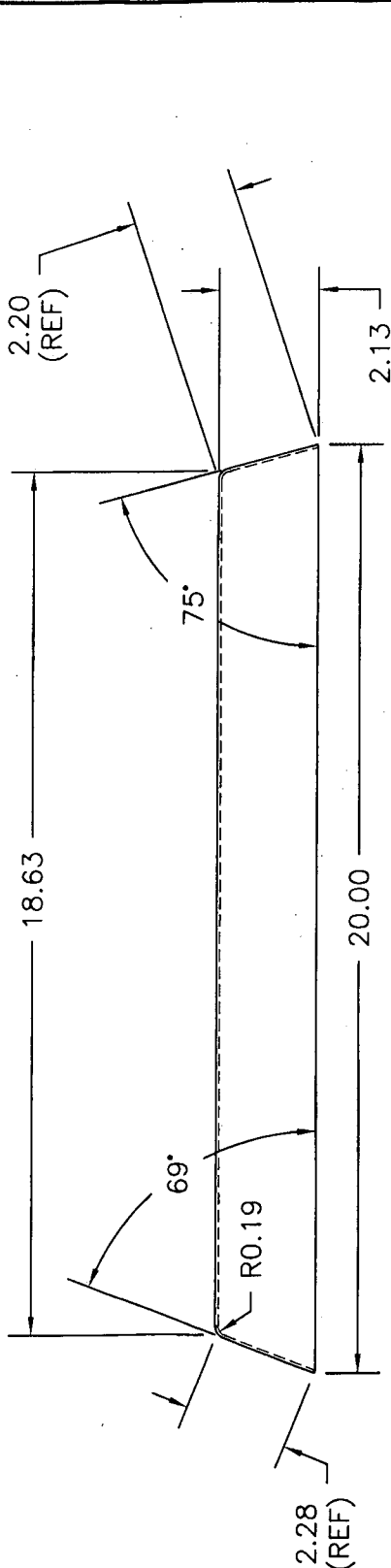
- 1) WELD PER DART QSI 004
- 2) FINISH: ACID ETCH AND ALODINE PER DART QSI 005 4.1
- 3) ALL DIMENSIONS ARE IN INCHES
- 4) ALL TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED

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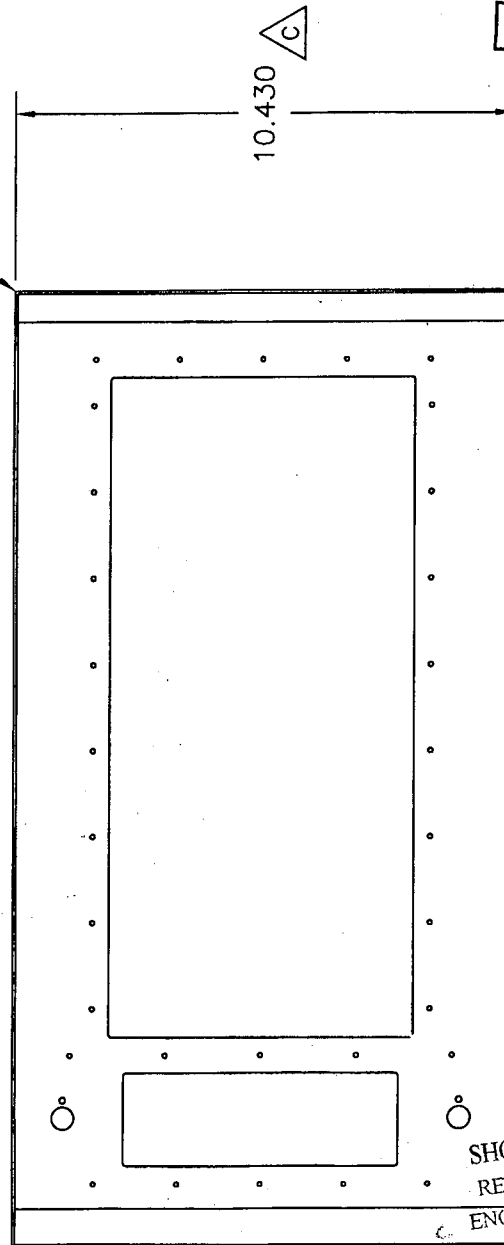
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CHECKED <i>[Signature]</i>	APPROVED <i>[Signature]</i>	DRAWING NO. D3363	REV. C SHEET 2 OF 3
DATE 07.01.26	TITLE CONSOLE ASSEMBLY		SCALE 1:4



GRIND OUTSIDE
WELD FLUSH
(TYP 4 PLACES)



RELEASED

07.06.04 *[Signature]*

D3363-1 BEND DETAIL

(MAKE FROM D3363-1F FLAT PATTERN)

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D3363-1 CONSOLE

- 1) WELD PER DART QSI 004
- 2) FINISH: ACID ETCH AND ALODINE PER DART QSI 005 4.1
- 3) ALL DIMENSIONS ARE IN INCHES
- 4) ALL TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED

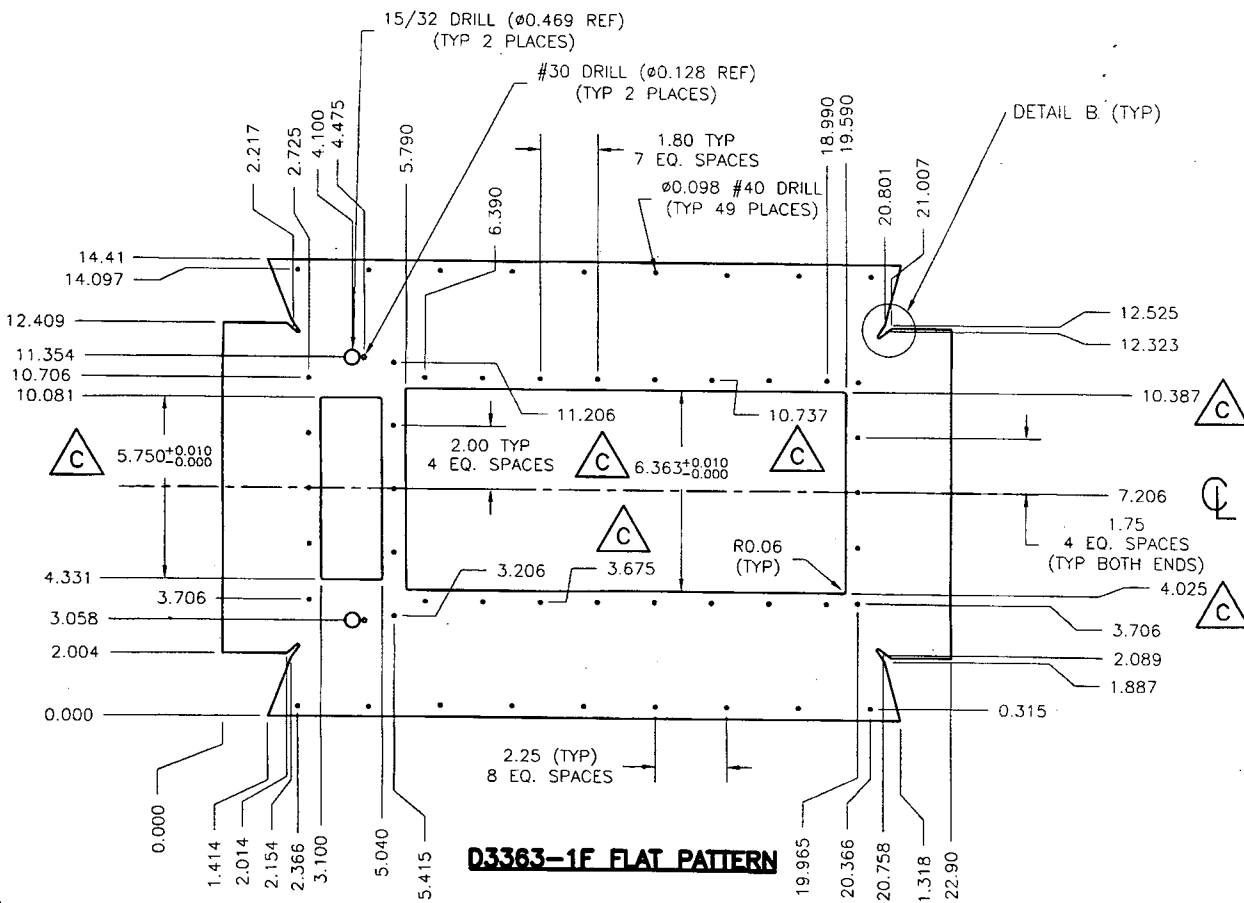
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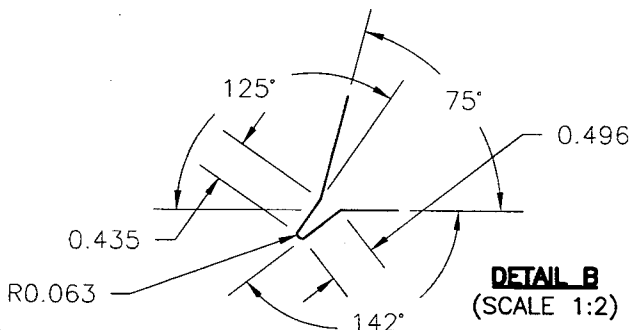
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DESIGN	DRAWN BY	DART AEROSPACE LTD	REV. C
CHECKED	APPROVED	HAWKESBURY, ONTARIO, CANADA	SHEET 3 OF 3
DATE	TITLE	CONSOLE ASSEMBLY	SCALE
07.01.26	D3363		1:6

RELEASED
07.06.04



D3363-1F FLAT PATTERN



D3363-1F CONSOLE (FLAT PATTERN)

- 1) MATERIAL: 6061-T6/T651 ALUMINUM 0.063 THICK
PER QQ-A-250/11 OR AMS 4025 OR AMS 4027
(REF DART SPEC M6061T6S.063)
- 2) FINISH: NONE
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) PART IS SYMMETRICAL ABOUT CENTERLINE

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